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MONTANA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL SCIENCES

Monthly Activities Report
of the Air Quality Bureau

October, 1979

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1. Highlights:

Set up a new monitoring station in East Helena.

The Enforcement Section held a number of office conferences whereby violators were given an opportunity to discuss various remedies to bring their operations into compliance.

Several MAPS reports were published and distributed.

2. Ambient Air Quality Network:

a. Standards Exceeded:

SO_2 near Helena Microwave Broudy East Station

no violations for the month of October

b. Air Stagnation Advisories:

None in October, however open burning restrictions were in effect on

10/6/79 - airsheds 1 through 8 for all elevations
10/7/79 - airsheds 1 through 8 for all elevations
10/11/79 - airsheds 1 through 5 below 6500 feet
10/12/79 - airsheds 1 through 4 below 5000 feet
10/13/79 - airsheds 1 through 8 below 6000 feet
10/31/79 - airsheds 1 through 6 below 5000 feet

c. Laboratory Status:

Total Determinations for Month	1988
Total Samples for Month	483

3. Permits and Tax Credits:

a. Construction Permits, applied for

Decker Coal Company, Decker, surface coal mining equipment, silos, conveyors
Mortensen Construction, Liberty Co., gravel crusher
Baltrusch Construction, Hill Co., gravel crusher
Zook Brothers, Rosebud, Prairie, Park, and Toole Counties (4 separate permits) - batch plant and gravel crushers
Meyer Construction, Musselshell and Fergus, gravel crusher

Construction Permits, approved

Gus Albert, Contractor, Rosebud County, hot plant
Dept. of Highways, Roosevelt, McCone, Valley, and Phillips Counties, hot plant
McIntyre Construction, Flathead Co., crusher and hot plant
Baltrusch Construction, Hill Co., gravel crusher
Zook Brothers Construction, Sanders Co., batch plant
Mortensen Construction, Teton Co., crusher and screening plant
Baltrusch Construction, Beaverhead Co., gravel crusher

c. Tax Credits

Montana Power Co. and Puget Powr tax certification requests were processed for Colstrip 1 & 2. Total amount requested was $108,777.66 for emission monitoring equipment. Of this amount, MPCo and Puget will have to specify capital costs to the Department of Revenue for the certified monitors. All monitors and overhead costs were not certifiable. Of the total amount requested for air pollution control equipment ($5,071,465.07), $2,983,641.61 was approved, which must be halved for each partner.

4. Variance Status:

a. Current

ASARCO, rule 16-2.14(1)-S1470(2), Sulfur Oxide emissions applicable to lead-zinc complex, final compliance due June 30, 1980

Berg Lumber, rule 16-2.14(1)-S1490, Open Burning, final compliance date June, 1980

The Anaconda Co., application for variance from sulfur oxide emissions, scheduled to be heard at the November 16, 1979 Board hearing

Anaconda Aluminum, application for variance from fluoride emissions, hearing scheduled November 16, 1979

b. New - None applied for

5. Enforcement Actions:

a. Citations

Helena Sewage Treatment Plant, Helena, MT - 791029-SS-1; Plant in violation of rule 16-2.14(1)-S1480, Control of Odors

Continental Oil Company, Billings, MT 791005-JV-1; flare in violation of rule 16-2.14(1)-S1460, Visible Air Contaminants Restrictions

Dugdale Construction, Butte, MT - 791010-HK-1, Asphalt Plant in violation of rule 16-2.14(1)-S1460

Northern Cheyenne Forest Products, Lame Deer, MT 7910003-JV-1; open burning in violation of rule 16-2.14(1)-S1490, Open Burning Restrictions

b. Notice of Violations and Order to Take Corrective Action

Exxon, Billings - ordered to control emissions from coke handling and storage facility by April 1, 1980

Stoltze Conner, Darby - ordered to discontinue use of tepee burner except during emergency situations by January 1, 1980

Helena Sand and Gravel, Helena - ordered to operate asphalt plant in compliance by June 1, 1980

6. Tepee Burner and Open Burning:

No. of tepee burners presently in operation - 20

Open Burning Permits Issued:

Kalispell Office	386	Sanders County	2
Cascade County	20	Yellowstone County	33
Lake County	91	Rest of State	686
Missoula County	49	Total	1237

7. Source Tests Performed:

a. Agency Source Tests - none

b. Non-Agency Source Tests

Kaiser Cement, Montana City, kiln, no report - On October 15, 1979, EERC conducted particulate source tests. They were unable to complete SO2, but fluoride results can be determined from data collected during the particulate tests. SO_2 tests were conducted some months before these last tests and the AQB has those results. The reason SO_2 tests could not be completed during this series was that the coal mill blew up and thus they will be back on natural gas until sometime in 1980. None of the recent test data has been made available; therefore compliance status during the tests is unknown.

Montana Power, Colstrip, Colstrip 1 & 2, NSPS in compliance - Results from source tests on June 26-28, 1979, were just submitted to the Bureau. All tests indicate compliance, however there has been a marked increase in particulate emissions from Unit No. 1 in comparison to previous tests and Unit No. 2 appears to be gradually increasing emissions over initial testing levels.

Dugdale Construction, Butte, batch plant, no report - This hot mix plant was tested on October 9, 1979, by EERC. No results are available.

Gilman Construction, Anaconda, hot mix plant, NSPS in compliance - This drum mixer asphalt plant was tested on October 17, 1979. The results indicate compliance with the NSPS for hot mix plants. Particulate concentration averaged 0.011 gr/sdcf as compared to the standard of 0.04 gr/sdcf. Actual particulate emissions were less than three (3) lbs per hour. The plant uses a baghouse for particulate control. Visual observations indicated zero opacity.

8. Field Investigations:

Gilman Construction, Anaconda, inspected source tests at hot mix plant
Dugdale Construction, Butte, hot mix observed in visual non-compliance; dust emissions in excess of standard; citation issued
Stoltze Conner, Darby, investigation, citation issued
American Chemet, East Helena, investigation in response to complaint
Helena Sewage Treatment Plant, Helena, inspection in response to complaint, citation issued
Stoltze Land & Lumber, Dillon, routine inspection
Pfizer Talc, Dillon, routine inspection
Kaiser Cement, Montana City, routine inspection

9. Complaints:

Refineries, Billings, odors, investigations (several complaints)
ASARCO/Kaiser, Helena, smoke, investigation
American Chemet, East Helena, odors, inspection
Franklin Mine Road, Helena, dust, investigation, no action taken
Sewage Treatment Plant, Helena, odor, met with division officials
Dugdale Construction, Butte, smoke, telephone conversation
North Country Stove Works, Helena, chimney smoke, called manager
Kaiser Cement, Montana City, heavy smoke and steam plume, inspection
American Chemet, Helena, dust, took dust samples

10. Data Processing Services:

a. Ambient Data Summary - See attached for month of September

b. Emission Inventory Status: completed 90% of the work on establishing an emission factor table for the Area Source EIS.

c. Prevention of Significant Deterioration - no activities

d. Modeling - no activities

11. Environmental Impact Statements:

The EIS for the ambient air standards is being finalized. The report should be published in December.

12. Status of Studies, Contracts and Reports:

Historical Emission Inventory, MAPS, is being circulated for comment
Update and Improvement of Emission Inventory, MAPS, sent to printers
Flathead River Report is being printed
Flathead River Study budget has been finalized
Poplar River Study budget has been finalized
MAPS budget was revised
MAPS reports are currently being printed and distributed; copies are available at the AQB
A new study is beginning in Missoula having to do with wood stove emissions; Missoula City-County Health Department is performing the study

13. Schools and Training:

A smoke school was conducted on October 10 and 11 in Helena.

One Bureau employee attended an EPA course in Lansing, Michigan that was an update on modeling.

14. Public Hearings and Meetings:

a. Public Hearings held - None

b. Meetings attended:

Dept. of Natural Resources and American Timber, Helena, regarding construction of plywood mill at Olney
Stoltze Land and Lumber, Helena, office conference, regarding discontinuing use of tepee burner
Sanitarian's Conference, Bozeman, represented AQB
Northern Cheyenne Forest Products, Helena, regarding citation issued to them
Helena Sand & Gravel, Helena, regarding order to operate asphalt plant in compliance
Exxon, Billings, Helena, office conference regardong order to control emissions from coke handling and storage facility
Bill Burke, Butte Health Department, Helena, regarding MAPS
USFS, Marana, Arizona, regarding land management
Lewis and Clark County Health Dept. Helena, regarding starting an air pollution control agency
Peabody Coal, Helena, to discuss their coal mine expansion application
Johns-Manville-Chevron, Helena, to discuss possible permit application for a platinum mining process in eastern Montana
Shell Oil, Helena, to discuss possibility of modifying their present permit
Washington Construction, Helena, to discuss possible re-opening of Rocky Mountain Phosphate
Orientation, Helena, for new employees in the Health Department

c. Intra-staff meetings

AQB staff meetings
MAPS staff meetings
Ambient standards staff meetings
Special projects meetings (Flathead River, Poplar River, Missoula study)

15. Public Information Requests:

Sent copies of MAPS reports, Clean Air Act, rules, to various individuals

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

MONTHLY SUMMARY OF AIR QUALITY DATA

September 1979

Pollutant: Total Suspended Particulate Units: micrograms/m^3

AQCR	Site Location	AREA HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
140	Morton-Decker Blg. Horn Co.	111	129	129	46	9	
	Warren Ranch Blg Horn Co.	75	113	113	32	8	
	KOHL B'llings	130	130	130	49	9	
	City Hall Billings	134	288	288	83	8	
	Grand Ave. Sch. Billings	121	302	302	77	9	
	Central Park Billings	266	266	260	89	9	1 exc. Fed. Pri. Std.
	Lockwood School Billings	258	258	258	100	5	10 exc. Fed. Sec. Std. 3 exc. Fed. Sec. Std.
	Laurel Jr. High Laurel	90	90	90	46	8	
141	Hospital Roof Great Falls						
	Fire Sta. #1 Great Falls						
	Kiwanis Park Great Falls	92	111	111	50	9	
142	HiWay Jct. Anaconda	53	86	86	44	8	
	Lincoln School Anaconda	202	303	303	55	9	3 exc. Fed, Sec, Std.
	Floral Park Butte	80	112	112	55	9	
	McKinley Res. Granite Co.			*			
	Traphagen Hall Bozeman	106	106	106	43	9	

Pollutant: Total Suspended Particulate Units: micrograms/m^3

AQCR	Site Location	AREA HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
142	Dr. Canty Res. Granite Co.	136	181	181	73	9	
	Greeley School Butte	122	196	196	83	9	
	Hebgen Park Butte	139	225	225	81	9	
	Tierney Res. Silver Bow Co.	83	83	83	41	9	
	Microwave Jefferson Co.	69	89	89	37	9	
	212 E. Pacific East Helena	150	181	181	82	9	
	Cogswell Bldg. Helena	98	211	211	60	9	
143	Lindsay Dawson Co.	208	208	208	48	9	1 exc. Fed. Sec. Std.
	Lame Deer Rosebud Co.	33	143	143	20	9	
	Fort Peck McCone Co.			*			
	BN Site Colstrip	43	174	174	51	9	
	McRae Site Colstrip	46	69	69	22	9	
	Border Site Scobey	38	68	68	22	9	

* - Site no longer in operation

Pollutant: Total Suspended Particulate Units micrograms/m^3

AQCR	Site Location	AREA HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
144	Anders Res. Col Falls	279	376	376	153	9	5 exc. Fed. Sec. Std.
	NARC Col. Falls	43	63	63	28	9	2 exc. Fed. Pri. Std.
	Ronan Lake County	288	311	311	117	9	2 exc. Fed. Sec. Std.
	Polson Lake County	129	188	188	78	8	1 exc. Fed. Pri. Std.
	Libby-Brown Linchm Co.	186	610	610	199	9	3 exc. Fed. Sec. Std.
	Kalispell-Strom Flathead Co.	208	343	343	92	9	1 exc. Fed. Sec. Std.
	Kalispell Airport Flathead Co.	107	120	120	60	8	
	Courthouse Roof Missoula	154	267	267	89.1	9	1 exc. Fed. Sec. Std.
	Lion's Park Missoula	154.9	419.4	419.4	94.8	9	3 exc. Fed. Sec. Std.
	Rose Park Missoula	130.0	317.3	317.3	91.6	9	
	Hoerner Weld #1 Missoula Co.	118	118	118	44.5	9	
	Hoerner Weld #2 Missoula Co.	122.3	157.7	157.7	47.7	9	

Dichotomous

Pollutant: Respirable Particulate - Sampler Units: micrograms/m^3

AQCR	Site Location	AREA HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
140	Central Park Billings			***			
141	Kiwanis Park Great Falls			***			
142	Lincoln School Anaconda						
	fine	13.0	261.3	261.3	15.5	7	
	coarse	35.8	157.7	157.7	22.9	7	
	Hebgen Park Butte						
	fine	22.0	22.7	22.7	12.6	6	
	coarse	76.6	82.9	82.9	33.6	6	
143	Border Site Scobey			***			
142	Lion's Park Missoula						
	fine	44.8	83.2	83.2	18.7	8	
	coarse	41.0	184.2	184.2	43.4	8	
	Courthouse Roof Missoula			***			
	Kalispell Airport Flathead Co.			***			
142	Floral Park FS Butte						
	fine	14.1	36.1	36.1	12.1	8	
	coarse	37.8	78.1	78.1	22.3	8	

state publications

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

Monthly Summary of Air Quality Data

September 1979

Pollutant: Miscellaneous Continuous Data — Units: ppm

AQCR	Site Location	HIGH READING: Current Month	HIGH READING: Year-to-Date	HIGH READING: Running Year	ARITHMETIC AVER.: Year-to-Date	ARITHMETIC AVER.: No. of Mons. of Data	Comments
	Carbon Monoxide						
142	Skyline West Butte			*			
	Lincoln School Anaconda						
	Hebgen Park Butte	5.8	5.8	5.8	1.9	1	
144	Lion's Park Missoula			**			
	Hydrocarbons						
142	Hebgen Park Butte			**			
	Lincoln School Anaconda	3.0	3.0	3.0	1.7.	9	
	Lion's Park Missoula	3.13	3.13	3.13	1.86		
	Ozone						
140	Central Park Billings	0.110	0.145	0.145	0.027	9	
142	Lincoln School Anaconda	0.051	0.082	0.082	0.032	9	
	Hebgen Park Butte			**			
144	Lion's Park Missoula	0.046	0.075	0.075	0.029		

* - Site discontinued.
** - Analyzer down, no data.

Pollutant: Miscellaneous Continuous Data — Units: ppm

AQCR	Site Location	HIGH READING: Current Month	HIGH READING: Year-to-Date	HIGH READING: Running Year	ARITHMETIC AVER.: Year-to-Date	ARITHMETIC AVER.: No. of Mons. of Data	Comments
	Nitrogen Dioxide						
140	Central Park Billings	0.064	0.110	0.110	0.014	2	
141	Kiwanis Park Great Falls	0.035	0.050	0.050	0.008	7	
142	Hebgen Park Butte	0.078	0.078	0.078	0.019		
	Lincoln School Anaconda			**			
144	Lion's Park Missoula	0.084	0.084	0.084	0.015	9	
	Sulfur Dioxide						
140	Central Park Billings	0.100	0.245	0.245	0.012	9	
	Lockwood School Billings	0.245	0.350	0.350	0.014	9	
	Laurel Farm Laurel	0.05	0.74	0.74	0.032	9	
141	Kiwanis Park Great Falls	0.005	0.070	0.070	0.001	7	
142	HiWay Jct. Anaconda			*			
	Mill Creek Anaconda			*			
	Lincoln School Anaconda	0.98	4.21	4.21	0.037	9	3 exc. Fed. 24 hr Std.
	Microwave Jefferson Co.	0.13	0.17	0.17	0.0	9	
	Broudy Ranch Jefferson Co.	0.06	0.08	0.08	0.0	9	

* - No longer in operation.

Pollutant: Miscellaneous Indicators — Units

AQCR	Site Location	HIGH READING: Current Month	HIGH READING: Year-to-Date	HIGH READING: Running Year	ARITHMETIC AVER.: Year-to-Date	ARITHMETIC AVER.: No. of Mons. of Data	Comments
	Dustfall-tons/sq. mile						
141	Mountain States Great Falls			***			
	Fire Sta. #1 Great Falls			***			
	Sulfation Rate - mg Oz/100 sq. cm						
140	West Cemex Billings	0.20	0.56	0.56	0.34	9	
	Farm E. of Cemex Billings	0.88	1.51	1.51	0.92	9	
141	Stock Car Track Great Falls			***			
	Phillips Ref. MT Great Falls			***			
	Phillips Ref. E Great Falls			***			
142	Microwave East Helena	0.18	0.56	0.56	0.23	7	
	212 E. Pacific East Helena	0.33	0.37	0.37	0.24	9	
	East Stack Sta. East Helena			**			
	Broudy Ranch East Helena	0.12	0.27	0.27	0.12	9	
	2580 Prickly Pear East Helena	0.37	0.37	0.37	0.17	9	
	Grant Kohrs - C Powell County						

*** - Data unavailable at time of report.

Pollutant: Miscellaneous Indicators — Units:

AQCR	Site Location	HIGH READING: Current Month	HIGH READING: Year-to-Date	HIGH READING: Running Year	ARITHMETIC AVER.: Year-to-Date	ARITHMETIC AVER.: No. of Mons. of Data	Comments
	Fluoride Papers - mg/sq cm/30 days						
144	Dahlgrens Mt Box Flathead Co.						
	Anaconda South Flathead Co.						
	Glac. Park #1 Glac. Nat. Pk.	Data unavailable at time of report					
	Glac. Park #9 Glac. Nat. Pk.						
	Fluoride Plates - mg/sq cm/30 days						
144	Anaconda South Flathead Co.						
	Trailer - NAAC Flathead Co.						
	Glacier Park #1 Glac. Nat. Pk.	Data unavailable at time of report					
	Glacier Park #9 Glac. Nat. Pk.						

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